

**REMARKS**

Applicant thanks the Examiner for withdrawing the 35 U.S.C. § 112 rejection of record in the July 19, 2005 *Office Action*.

**Status of the Application**

Claims 1-12 are all the claims pending in the Application. Claims 1-12 stand rejected.

**35 U.S.C. § 101 Rejection**

The Examiner has rejected claims 1-5 under 35 U.S.C. § 101, as allegedly being directed to non-statutory subject matter. Specifically, the Examiner alleges that claims 1-5: (1) “are not tangibly embodied and not in the technological arts because [they] could be practiced with pencil and paper” (*O.A.*, p. 2, par. 3-1); and (2) do “not recite a concrete, useful, and tangible result because, for example, none of the claimed steps require use of hardware to accomplish the step” (*O.A.*, p. 8, par. 7-2).

Applicant respectfully submits that the Examiner is applying incorrect tests for patentable subject matter, as both the “technological arts” test (allegation (1) above) and the “machine implemented” test (allegation (2) above) have been explicitly discredited by the Board Of Patent Appeals and Interferences. See *Ex parte Lundgren*, Appeal No. 2003-2088 (Bd. Pat. App. & Int. Sept. 28, 2005) and the USPTO’s October 26, 2005 Pre-OG Notice *Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, Annex III* ([http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)).

Applicant respectfully submits that the correct test under 35 U.S.C. § 101 is simply whether the invention produces a “useful, concrete and tangible” result. In this regard (as previously pointed out), independent claim 1 recites “[a] method of evaluating the reflection performance of a reflecting mirror,” which includes “entering design information” and “displaying attribute information.” The displayed attribute information (a non-limiting example of which is shown in FIG. 13, and discussed on pages 42 and 43 of the instant Application) clearly provides a “useful, concrete and tangible” result, as it (for example) provides a designer with an analysis of whether or not various reflecting basic surfaces adequately reflect light from the light source. Thus, claims 1-5 clearly fall within the scope of patentable subject matter as defined by 35 U.S.C. § 101.

In view of the above, withdrawal of the rejection is respectfully requested.

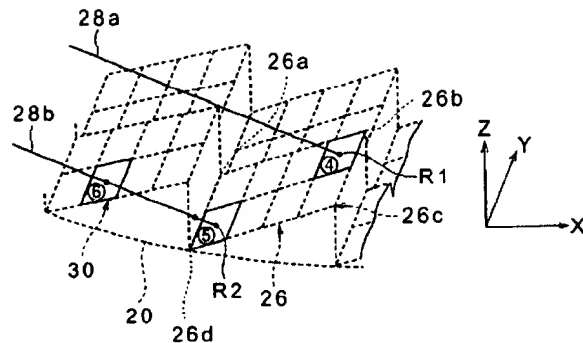
**35 U.S.C. § 102 Rejection**

The Examiner has rejected claims 1-12 under 35 U.S.C. § 102(a) as being anticipated by “ReflectorCAD User’s Guide,” Breault Research Organization, 1999, pp. 1-87 (hereinafter “*BRO*”). This rejection is respectfully traversed.

Applicant respectfully submits that *BRO* fails to teach or suggest independent claim 1’s recitation of “(b) displaying attribute information concerning an attribute indicative of whether **imaginary light** from the light source position **can effectively reach each of a first plurality of areas into which a first reflecting basic surface**, selected from among the plurality of reflecting basic surfaces, **is divided** on the basis of the design information; wherein the plurality of reflecting surfaces are discrete surfaces” (**emphasis added**).

As a matter of explanation regarding the claimed features, Applicant directs the Examiner to exemplary FIG. 10 of the instant Application, which illustrates examples of the:

- (1) imaginary light (represented by line 28a);
- (2) reaching a first one (4) of eight areas that discrete reflecting basic surface 26 is divided into.<sup>1</sup>



The Examiner alleges that *BRO* discloses (see p. 3, par. 5-1):

b) displaying attribute information (If a segment is selected, its output is displayed, page 65, paragraph 6) concerning an attribute indicative of whether imaginary light from the light source position can effectively reach each of a first plurality of areas (initial results in output view, page 38, Figure 24) into which a first reflecting basic surface, selected from among the plurality of reflecting basic surfaces (First Segment, page 28, section "Creating and Aiming the first Segment"), is divided on the basis of the design information (The Output Calculation Quality slider sets the quality of the output. More samples results in higher accuracy, page 25, paragraph 3; Figure 9; more samples implies the segment has been divided into more areas); wherein the plurality of reflecting basic surfaces are discrete surfaces (segments, page 17, Figure 2, Reflector View).

Accordingly (in view of the above), it is Applicant's understanding that the Examiner has identified: (1) the respective segments illustrated in Figure 2 (p. 17) of *BRO* as being equivalent to the recited discrete "reflecting basic surfaces;" and (2) the output graph in Figure 24 and the output slider in Figure 9 as somehow showing that the respective segments are "divided" into a

<sup>1</sup> This example is provided for the Examiner's convenience only, and is not intended to limit the scope of independent claim 1 in any way.

“first plurality of areas” and whether light from a light source can reach each of the “first plurality of areas.”

Applicant respectfully disagrees with the Examiner’s position.

Specifically, regarding the Examiner’s allegation (2), the portions alleged by the Examiner to disclose the recited features (*i.e.*, the “output view, page 38, Figure 24” and “the Output Calculation Quality slider” in Figure 9) only disclose: (A) an effective output of the reflector segment at a point distant from the reflector (*i.e.*, in the +Z direction as shown in Figure 6 on p. 22); and (B) the effective output of the reflector segment as a whole (*i.e.*, the entire output of the selected segment is shown at once, as illustrated in Figure 24 on p. 38).

Accordingly, this “output view” (or any other disclosed “output” in *BRO*) fails to indicate whether or not “each of a plurality of areas” of one of the segments in Figure 2 of *BRO* effectively reflect light. Rather, the “output view” is only useful to show how much light is reflected from the whole segment, not whether light reaches particular portions of that segment. It is simply impossible to tell from the “output view” whether (for example) light from the light source is effectively reaching a lower left area of the segment, as opposed to an upper right area of the segment. There is simply no way for a user to ascertain what portion of the segment is producing the output shown in the “output view,” let alone that light from the light source effectively reaches each of a plurality of areas of the cited segment (*e.g.*, one of the segments in Figure 2, p. 17 of *BRO*).

Further, Applicant respectfully submits that there is not even any teaching or suggestion that the segments of *BRO* are in any way “divided” into a “plurality of areas” as claimed. In this regard, Applicant respectfully disagrees with the Examiner’s allegation that “[t]he Output Calculation Quality slider sets the quality of the output[, that m]ore samples results in higher accuracy, page 25, paragraph 3; Figure 9[, and that] more samples implies the segment has been divided into more areas.” In contrast, the slider cited by the Examiner controls the quality of the output (*i.e.*, the sampling of the output), not a division or subdivision of the segments themselves. Applicant respectfully submits that no portion of *BRO* discloses that the segments themselves are subdivided in any manner, at least with respect to an analysis of whether light impinges upon such subdivisions.

Thus, Applicant respectfully submits that independent claim 1 is patentable over the applied reference.

Further, Applicant respectfully submits that *BRO* fails to teach or suggest: (1) independent claim 6’s “first transmitting means for transmitting, to the display device, attribute information concerning an attribute indicative of whether imaginary light from the light source position can effectively reach each of a first plurality of areas into which a first reflecting basic surface, selected from among the reflecting basic surfaces, is divided;” and (2) independent claim 9’s “first display process for displaying attribute information concerning an attribute indicative of whether imaginary light from the light source position can effectively reach each of a first plurality of areas into which a first reflecting basic surface, selected from among the

plurality of reflecting basic surfaces, is divided,” for reasons similar to that discussed above with respect to independent claim 1.

Further, Applicant respectfully submits that rejected dependent claims 2-5, 7, 8 and 10-12 are: (1) allowable at least by virtue of their dependency; and (2) separately patentable over the applied references.

For example, Applicant respectfully submits that *BRO* fails to teach or suggest dependent claim 5’s recitation of “generating a straight line, the straight line connecting the evaluation point to the light source position; and making a determination as to whether the straight line intersects another reflecting basic surface other than the first reflecting basic surface which is associated with the first plurality of areas.” There is simply no teaching or suggestion in *BRO* of any line formation, or the usage of such a line in an intersection analysis.

Thus, Applicants respectfully request that the Examiner withdraw this rejection.

### **Conclusion**

In view of the foregoing, it is respectfully submitted that claims 1-12 are allowable. Thus, it is respectfully submitted that the application now is in condition for allowance with all of the claims 1-12.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Response Under 37 C.F.R. § 1.116  
U.S. Application No. 09/765,639

Attorney Docket # Q62740

Please charge any fees which may be required to maintain the pendency of this application, except for the Issue Fee, to our Deposit Account No. 19-4880.

Respectfully submitted,



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**23373**

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